

## Green Roof @ University Malaya, List of plant species by IEN Consultants

No.	Image	General Name	Scientific Name	Type	Sun	Watering	Soil Condition	Functionality
<b>WET BED</b>								
1		Daun Kesum	Persicaria hydropiper (L.) Delarbre	Filler	Full/Half Sun	Waterlogged	Waterlogged Soils (Drains Site), Fertile Loamy Soils, Disease / Pest Resistant	Culinary: All parts of plant have pungent, sourish peppery taste. Leaves used fresh or dried to flavour Asian dishes like laksa. Leaves also eaten as vegetable by some Native American tribes (Cherokee, Iroquois). Seeds used raw or cooked as condiment, pepper substitute and ingredient in wasabi in Japan. Sprouted seeds and young seedlings commonly used as garnish or added to salads. Note: Leaves contain oxalic acid.
2		Fishwort	Houttuynia cordata	Spiller	Full/Half Sun	Full/Half Sun	Waterlogged Soils (Drains Site), Easy to Grow	Food (Herb & Spice) Medicinal [Others]: Young shoots and leaves used in salads and garnishes in Vietnam. Whole plant is antimicrobial, antiviral and anti-inflammatory. Leaves and stems used in decoctions to strengthen immune system, treat cancer and coughs.
3		Kangkung	Ipomoea aquatica Forssk.	Spiller	Full	Full	Waterlogged Soils (Drains Site)	Edible Plant Parts (Edible Stems; Edible Leaves) Food (Fruit & Vegetable) Edible Plant Parts (Edible Stems; Edible Leaves), Medicinal [Others]: Food: Widely consumed in South East Asia as a leafy vegetable and is especially popular in Vietnam. Stems and leaves are typically consumed, while roots are used for medicinal purposes.
4		Pandan	Pandanus amaryllifolius Roxb.	Thriller	Full/Half Sun	Full/ Moderate	Well-Drained Soils, Fertile Loamy Soils, Easy to Grow	Food (Herb & Spice): Juice extracted from leaves is used to add fragrance to various types of teas and desserts. Desserts include cakes and kueh. The leaves are not consumed, but are removed from the dish before serving. The chlorophyll pigments in the leaves will colour foods green. In Indonesia, rice is sometimes steamed in baskets made of the leaves. Thai people wrap the leaves around pieces of seasoned meat before cooking.
5		Selom	Oenanthe javanica (Blume) DC.	Thriller/Filler	Half Sun	Full	Waterlogged Soils (Drains Site)	Edible Plant Parts (Edible Stems; Edible Leaves) Food (Fruit & Vegetable; Herb & Spice ) Edible Plant Parts (Edible Stems; Edible Leaves), Medicinal [Others]: Food: One of the most popular traditional vegetables in Southeast Asia, O. javanica has a long history of use as a leafy vegetable in East and Southeast Asia. Its leaves are used in soups, salads, and stir-fries.
6		Sweet Prayer Plant	Thaumatomoccus daniellii	Thriller	Full/Half Sun	Full	Likes humidity and lots of water. Can take full sun, as long as sufficient water is provided. Propagate by division of plants and rhizomes, suckers or seeds.	Edible Plant Parts (Edible Fruits) Food (Herb & Spice ) Edible Plant Parts (Edible Fruits), Medicinal [Others]: Food: Fruit aril (skin) contains an intensely-sweet protein called thaumatin. Traditionally used to sweeten bread, as well as to improve the flavour of sour food.
7		Setawar Tawar	Cheilocostus speciosus (J. Koenig) C. Specht	Thriller	Full/Half Sun	Full/ Moderate	Moist Soils, Waterlogged Soils (Drains Site), Fertile Loamy Soils, Easy to Grow	Edible Plant Parts (Edible Stems) Food (Fruit & Vegetable): The starchy rhizome is edible but fibrous, tasting watery with a hint of ginger, a close relation.) Medicinal (In Peninsular Malaysia, the plant is used medicinally by the Malays as a purgative or poultice, and for coughs, fever, leprosy and small pox. In India, the plant is used as a laxative and for skin diseases.
8		Chinese Knotweed	Persicaria chinensis	Filler	Full/Half Sun	Full	Moist Soils, Waterlogged Soils (Drains Site), Well-Drained Soils, Fertile Loamy Soils	Edible Plant Parts (Edible Leaves; Edible Stems; Edible Fruits) Food (Fruit & Vegetable; Herb & Spice) Edible Plant Parts (Edible Leaves; Edible Stems; Edible Fruits), Medicinal, Cut / Dried Flower [Others]: Food: Ripe fruits edible, sour-tasting. Tender young leaves and shoots
<b>DROUGHT BED</b>								
9		Aloe Vera	Aloe Vera	Thriller	Indoor	Minimal	Aloe vera grows best under direct sun in well-drained, porous soil, but it also tolerates light shade. In Singapore, it grows well in pots that are	Edible Plant Parts (Edible Leaves) Food (Fruit & Vegetable): Leaves contain a clear, tasteless tissue which is chopped and added raw to beverages and desserts for its jelly-like consistency. The bitter, outer green layer of the leaf should be peeled away before consuming the inner flesh which is known as aloe vera gel. )
10		Beluntas	Pluchea indica L.	Thriller	Full	Minimal to Full	Dry Soils / Drought, Moist Soils, Waterlogged Soils (Drains Site), Well-Drained Soils, Saline Soils / Salt Spray, Fertile Loamy Soils	Edible Plant Parts (Edible Leaves; Edible Stems) Food (Fruit & Vegetable) Medicinal (The leaves and stems contain antioxidants and other compounds which have anti-acetylcholinesterase activity (Noridayu et al 2011). Other compounds with this activity have been used to treat Alzheimer's disease. Further investigation is ongoing.)

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11		Ginseng jawa	Talinum paniculatum	Thriller/Filler	Full	Moderate/Minimal	Dry Soils / Drought, Well-Drained Soils, Fertile Loamy Soils, Shallow Media (8-10cm)	Food (Herb & Spice) Medicinal
12		Garlic Chives	Allium tuberosum Rottler ex Spreng.	Filler	Full/Half Sun	Moderate	Dry Soils / Drought, Well-Drained Soils, Fertile Loamy Soils, Shallow Media (8-10cm), Disease / Pest Resistant	Edible Plant Parts (Edible Leaves; Edible Flowers; Edible Stems) Food (Herb & Spice) Edible Plant Parts (Edible Leaves; Edible Flowers; Edible Stems), Medicinal [Others]: Food: Flowers, flower stalks, leaves and bulbs are all edible. Leaves of garlic chives may be consumed raw in salads or added to stir-fries, soups and dishes with
13		Boat Lily	Tradescantia spathacea Sw.	Filler	Full/Half Sun	Moderate	Provide good drainage to prevent root rot. Propagate by stem-cuttings, seeds or division. Watery sap may result in skin stinging and itching in	Medicinal: Plant believed to possess anti-microbial, insecticidal, anti-inflammatory and anti-cancer properties. Leaves boiled and made into a purple-coloured herbal tea to relieve body heatiness. Used in Thailand to treat fever, cough and bronchitis. Also used as remedy for amenorrhea, headache, sprains and rheumatism. Caution: Astringent sap may cause stinging and itching in susceptible individuals and animals.
14		Setawar Kampung	Kalanchoe pinnata (Lam.) Pers.	Filler	Full/Half Sun	Minimal	Dry Soils / Drought, Well-Drained Soils, Shallow Media (8-10cm), Disease / Pest Resistant, Easy to Grow	Edible Plant Parts (Edible Leaves) Food (Herb & Spice) Edible Plant Parts (Edible Leaves), Medicinal [Others]: Medicinal: Well-known for healing properties in folk medicine, said to be able to heal wounds with minimal scarring. Leaf pulp applied topically as poultices for
15		Globe Amaranth	Gomphrena globosa	Thriller	Full	Moderate	Dry Soils / Drought, Well-Drained Soils, Heavy Clay Soils	Cut / Dried Flower (The long lasting and bright color flowers are excellent for cut flower arrangement.) [Others]: The flowers of Thousand Day Red are boiled to make a tea. The tea has a fresh floral fragrance with sweet and mellow taste. It contains vitamin C, E and is known to reduce fatigue, slow aging.
16		Stevia	Stevia rebaudiana	Filler	Full/Half Sun	Moderate	Well-Drained Soils, Poor Infertile Soils, Acidic (low pH) Soils, Easy to Grow, [Remarks] (Grows best in slightly acidic soils of pH of 6.1 to 6.5.)	Edible Plant Parts (Edible Leaves) Food (Herb & Spice) : Fresh or dried leaves used in salads, sauces and beverages, or infused in boiling water to make sweet herbal tea. Fresh leaves can also be cooked and eaten as vegetable. Leaves traditionally used by indigenous South American tribes for hundreds of years to sweeten bitter medicinal drinks and tea. Nowadays,

## RHIZOME BED

17		Kunyit	Curcuma longa	Thriller	Half Sun	Full	C. longa thrives on well-drained fertile loamy soils, preferring lots of water but unable to withstand waterlogging. Full sun encourages the yield of the	Edible Plant Parts (Edible Leaves) Food (Herb & Spice) : The rhizome of C. longa contains a pigment, called curcumin, which gives the rhizome its yellow-orange colour. Widely used in Asian dishes, such as a spice and dye in curry powder and other food, the ground rhizome is also used as a colouring agent in processed food and sauces and is a cheaper substitute for
18		Halia	Zingiber officinale Roscoe	Thriller	Full/Half Sun	Moderate	Well-Drained Soils, Fertile Loamy Soils	An essential ingredient in many Asian dishes, the fresh rhizome is often used as a spice in Indian and Chinese cuisine for instance. Western cuisine, on the other hand, favours the use of the spice in dried powdered form for sweet foods, such as gingerbread. Ginger may also be preserved with sugar to make crystallised ginger, a traditional Christmas delicacy as well as popular with Asians. Ginger oil (the
19		Lengkuas	Alpinia galanga	Thriller	Full/Half Sun	Moderate	It grows best outdoors in moist, but well-drained, fertile soil. Apply compost as a mulch to help keep the roots moist and cool.	Food (Herb & Spice) : The rhizome has a sharp, spicy flavor which is popular in Southeast Asian cuisine. It is finely blended with other herbs to make a paste for laksa soup. Both new and old pieces of the rhizome are used, but the more fibrous, older pieces have more flavor.) Medicinal
20		Chinese ginger	Boesenbergia rotunda	Thriller	Full/Half Sun	Moderate	Moist Soils, Well-Drained Soils, Fertile Loamy Soils	Food (Fruit & Vegetable: Young rhizomes and young shoots are cooked as vegetable or eaten raw in Java and Malaysia. In the Caruban district, leaves are used together with those of teak as a wrapper for fermented soya bean cake.; Herb & Spice : The plant is cultivated for its rhizome in Indonesia, Malaysia, Indo-China and India. The rhizome are consumed as an aromatic spicy flavoring for food and pickles)

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21		Cekur	Kaempferia galanga	Filler	Half Sun	Full	Plant can be grown from rhizomes bought from the market. Plant in fertile, well-drained, loamy soil. Requires filtered sunshine in a sheltered	Edible Plant Parts (Edible Leaves) Food (Fruit & Vegetable; Herb & Spice) Edible Plant Parts (Edible Leaves), Medicinal [Others]: Fresh leaves are eaten as a vegetable and rhizomes are used as a spice in Javanese and Balinese cuisine. Rhizomes are used in traditional medicine for the
22		Kantan	Etlingera elatior	Thriller	Full/Half Sun	Full	Moist Soils	Edible Plant Parts (Edible Flowers) Food (Herb & Spice): The flower buds of the Torch Ginger has a unique fragrance and taste which is often used in cooking. Some common dishes that use the flower are rojak and laksa. It can also use as a garnish for sour-savory soup.) Edible Plant Parts (Edible Flowers), Medicinal (It is believed that the decoction of its
23		Sweetscented Marigold	Tagetes lucida	Thriller	Full/Half Sun	Moderate	Plant in well-drained soil and space individuals 0.3 m apart. Usually a hardy plant that is resistant to pests and disease. However, the plant may	Edible Plant Parts (Edible Flowers) Food (Fruit & Vegetable; Herb & Spice): The leaves have a similar, but stronger flavor to French Tarragon. In the lowland tropics (like Singapore), it is easier to grow than French Tarragon. The flavor has also been described as being similar to licorice or anise. Flowers may be consumed raw in salads. The leaves may be added to fish or
24		Ginger Lily	Hedychium coronarium J. König	Thriller	Full/Half Sun	Full/ Moderate	Moist Soils, Well-Drained Soils	Food (Herb & Spice) Medicinal (The mashed stem is used to treat cuts and swellings. The ground rhizome can be used to treat fever. Seeds are also aromatic, used to relieve flatulence problems. Traditionally, the rhizome and stems are used to relieve headache.) [Others]: The aromatic essential oil from the flowers is used to make perfumes, soaps
25		Arrowroot	Maranta arundinacea	Thriller	Full Sun	Moderate	Well-Drained Soils, Fertile Loamy Soils	Food (Fruit & Vegetable: The underground rhizomes are made into flour or eaten raw.) Medicinal (The underground rhizomes are made into flour or eaten raw.)

## CLIMBER

26		Passion Fruit	Passiflora edulis	Climber	Full	Moderate	Well-Drained Soils, Fertile Loamy Soils, Disease / Pest Resistant	Food (Fruit & Vegetable) Edible Plant Parts (Edible Fruits)
27		Bunga Telang	Clitoria ternatea L.	Climber	Full Sun	Moderate	Well-Drained Soils, Fertile Loamy Soils, Easy to Grow	Edible Plant Parts (Edible Flowers) Food (Herb & Spice): The flowers are used to extract a blue, edible dye that is used in making traditional Malay pastries.) Medicinal (Traditionally, roots are used to treat abdominal swelling, sore throats and mucus disorders. Juice from the roots is mixed with cold milk as a remedy to remove
28		Petawali	Tinospora crispa	Climber	Full	Moderate	Poor Infertile Soils, Fertile Loamy Soils, [Remarks] (Plant tolerates a wide range of soils.)	Edible Plant Parts (Edible Fruits) Food (Herb & Spice) Edible Plant Parts (Edible Fruits), Medicinal [Others]: Stem decoctions used to purify blood, as well as to treat stomachache, fever, worms, gonorrhoea and skin conditions like itch and ulcers. Stem and root extracts
29		Malabar Spinach	Basella alba 'Rubra'	Climber	Full/Half Sun	Moderate	Well-Drained Soils, Fertile Loamy Soils, [Remarks] (Optimal soil pH 4.5 - 7.0. Plants said to grow slowly in alkaline soils.) nematode prone	Edible Plant Parts (Edible Leaves; Edible Stems) Food (Fruit & Vegetable; Herb & Spice) Edible Plant Parts (Edible Leaves; Edible Stems), Medicinal [Others]: Young leaves and stems eaten raw in salads, as steamed vegetable, or used as thickening agent in stews and soups. Cooked leaves taste mildly of spinach, and
30		Sireh	Piper betle	Climber/Spiller	Half Sun	Full	This species has some drought tolerance, but grows best in fertile, well-drained soil that is kept moist. .	Food (Herb & Spice) Medicinal (Leaf extracts have antimicrobial and antioxidant activity (Nalina and Rahim 2007, Dasgupta and De 2004). They also promoted glucose metabolism in diabetic rats (Santhakumari et al 2006), but might cause cancer when consumed with lime and areca nut (a popular combination known as piper betel quid).)

## POTTED TREE

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No.	Image	General Name	Scientific Name	Type	Sun	Watering	Soil Condition	Functionality
31		Terengganu Cherry	<i>Lepisanthes alata</i>	Tree	Full	Moderate	Moist Soils, Well-Drained Soils	Edible Plant Parts (Edible Fruits) Food (Fruit & Vegetable: The fruit pulp is sweet and edible.)
32		Surinam Cherry	<i>Eugenia uniflora</i>	Tree	Full	Full	fertile, well-draining soil. Sandy soils should have a thick mulch topping over the tree's root zone	Food (Fruit & Vegetable)
33		Miracle Berry	<i>Synsepalum dulcificum</i>	Tree	Full	Moderate	Well-Drained Soils, Alkaline (high pH) Soils, [Remarks] (Prefers acidic soils of pH 4.8 - 5.5.)	Edible Plant Parts (Edible Fruits) Food (Fruit & Vegetable; Herb & Spice) Edible Plant Parts (Edible Fruits), Medicinal [Others]: In Africa where modern refrigeration is not available, fruits are traditionally chewed before meals to make stale food taste better.
34		Malayan Cherry	<i>Muntingia calabura</i>	Tree	Full	Moderate	It is best grown under full sun, in well-drained, fertile soil.	Edible Plant Parts (Edible Fruits) Food (Fruit & Vegetable) Edible Plant Parts (Edible Fruits) [Others]: The sapwood is yellowish, compact, fine-grained, and can be easily used for general carpentry. It is also a potential source for fuel as it ignites quickly upon being
35		Limau purut	<i>Citrus hystrix</i>	Tree	Full/Half Sun	Moderate	Moist Soils, Fertile Loamy Soils	Edible Plant Parts (Edible Fruits; Edible Leaves) Food (Herb & Spice: The leaves add a lemon flavour to various types of dishes, such as Tom Yum soup. The rind can be added to curry, such as green curry paste.) Medicinal
36		Limau Kasturi	<i>Citrus x microcarpa</i>	Tree	Full/Half Sun	Moderate	Moist Soils, Well-Drained Soils, Easy to Grow	Food (Fruit & Vegetable: Can be eaten fresh or made into juice or marmalade.; Herb & Spice: Used as a seasoning in meat and seafood dishes.) Medicinal (Juice made from the fruits can be used to relieve coughs and colds)
37		Coffee Tree	<i>Coffea sp.</i>	Tree	Full	Moderate	Well-Drained Soils, Fertile Loamy Soils, Acidic (low pH) Soils	Edible Plant Parts (Edible Seeds; Edible Fruits) Edible Plant Parts (Edible Seeds; Edible Fruits) [Others]: The seeds are used to make coffee. First, the tough layer surrounding the seed is removed. The seed is then roasted, ground and mixed with hot water to make coffee.
38		Cocoa	<i>Theobroma cacao</i>	Tree	Half Sun	Moderate/ Full	Moist Soils, Waterlogged Soils, Well-Drained Soils, Fertile Loamy Soils, Acidic (low pH) Soils	Edible Plant Parts (Edible Fruits; Edible Seeds) Food (Fruit & Vegetable: The fruit pulp surrounding the seeds can be consumed raw or processed into desserts.; Herb & Spice: The seeds are dried and fermented in the sun to make cocoa beans. The cocoa beans then go through further processing including roasting, crushing, grinding and pressing to make chocolate and cocoa)

## VEGE BED

39		Cekur Manis	<i>Sauvagesia androgynus</i>	Thriller	Full/Half Sun	Moderate	Well-Drained Soils, Fertile Loamy Soils, Acidic (low pH) Soils, Easy to Grow	Edible Plant Parts (Edible Fruits; Edible Flowers; Edible Stems; Edible Leaves) Food (Fruit & Vegetable: It is a traditional crop of Southeast Asia and a popular vegetable in Malay cuisine -- where leaves and young stems are eaten raw, steamed, boiled with beansprouts, cooked with eggs, or added to soups. It is recommended to crush and soak the leaves in water to wash away the sap before cooking. The plant
40		Brazilian Spinach	<i>Alternanthera sissoo</i>	Thriller/Filler	Half Sun	Full	This plant requires soil with high organic matter content and should be fertilized with a high nitrogen feed. It grows best at about 50% shade,	Food (Fruit & Vegetable: In Brazil, the leaves are often eaten raw as part of a salad. The leaves should be cooked if consumed in large quantity, because they contain oxalic acid. The flavour is usually mild, but some cultivars have a slightly bitter taste.) [Others]: It can be inter-cropped with other vegetables, because it forms a dense mat of edible leaves which can prevent weeds from becoming established.

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41		Sambung Nyawa	<i>Gynura procumbens</i>	Filler/Thriller	Longevity Spinach	Moderate	Well-Drained Soils	Edible Plant Parts (Edible Leaves) Food (Fruit & Vegetable: In Java, the leaves are consumed raw as a vegetable.) Medicinal (The plant is used in folk medicine to treat fever, kidney ailments and dysentery. In Singapore, some Chinese believe that the leaves can lower blood pressure and reduce blood sugar levels.)
42		Ulam Raja	<i>Cosmos caudatus</i>	Thriller/Filler	Full	Full	Well-Drained Soils, Fertile Loamy Soils	Edible Plant Parts (Edible Leaves) Food (Fruit & Vegetable: Consumed as a vegetable in Malay cuisine. The leaves may be consumed raw in salads. Young shoots have been described as tasting like mangoes. It contains more than 20 types of antioxidants (Shui et al 2005).) Edible Plant Parts (Edible Leaves), Medicinal (The roots contain 4 types of antifungal)
43		Thai basil	<i>Ocimum basilicum</i> (Thai basil)	Thriller	Full/Half Sun	Moderate	Well-Drained Soils, Fertile Loamy Soils	Edible Plant Parts (Edible Leaves) Food (Herb & Spice)
44		Siam queen	<i>Ocimum basilicum 'Siam Queen'</i>	Thriller	Full/Half Sun	Moderate	Well-Drained Soils, Fertile Loamy Soils	Edible Plant Parts (Edible Leaves) Food (Herb & Spice: The leaves have a liquorice flavour which is ideal for salads, sauces and Thai cuisine.)
45		Daun Kaduk	<i>Piper sarmentosum</i>	Spiller	Half Sun	Full	Moist Soils, Well-Drained Soils, Fertile Loamy Soils, Easy to Grow	Edible Plant Parts (Edible Flowers; Edible Stems; Edible Leaves) Food (Fruit & Vegetable: Young leaves and shoots eaten raw and dipped in sambal as salad. Leaves also used to wrap snacks or used as lining to prepare appetizers like otak-otak (spicy fish paste). ; Herb & Spice: Leaves sliced and added into a herb and rice dish called Nasi Ulam or Nasi Kerabu in northern states of Peninsular Malaysia.
46		Mint	<i>Mentha arvensis</i>	Filler	Full/Half Sun	Moderate	Waterlogged Soils (Drains Site), Well-Drained Soils, Fertile Loamy Soils, Acidic (low pH) Soils, Alkaline (high pH) Soils, Shallow Media (8-10cm), Easy	Edible Plant Parts (Edible Leaves) Food (Herb & Spice ) Edible Plant Parts (Edible Leaves), Medicinal [Others]: Food: The leaves may be eaten raw in salads or used to make tea. The essential oils are used to flavor desserts. Medicine: American Indians used the leaves
47		Orange Mint	<i>Mentha x piperita f. citrata 'Eau de Cologne'</i>	Filler	Half Sun	Moderate	Moist Soils, Well-Drained Soils	[Others]: Unlike other mint cultivars, 'Eau de Cologne' is not used for culinary purposes. It is mainly grown for its perfume-like fragrance, and the leaves can be added to potpourri.
48		Peppermint	<i>Mentha x piperita L.</i>	Filler	Full/Half Sun	Full	Moist Soils, Well-Drained Soils	Edible Plant Parts (Edible Leaves) Food (Herb & Spice: Peppermint is often used as tea and for flavoring ice cream, candies, toothpaste.) Medicinal (Traditionally, peppermint essential oil has been used to treat indigestion, headache, colic, gingivitis, irritable bowel syndrome, spasms and rheumatism. It
49		Sawtooth coriandor	<i>Eryngium foetidum L.</i>	Thriller/Filler	Full/Half Sun	Moderate	Well-Drained Soils, Fertile Loamy Soils, Disease / Pest Resistant, [Remarks] (Sandy loam)	Food (Herb & Spice: In Thailand, Vietnam, Laos and India, the leaves are used fresh as a culinary herb which has a similar, but stronger flavor than Coriander ( <i>Coriandrum sativum</i> ). The leaves are used to season meat and other foods in Caribbean, Latin American and Asian cuisines. It is often added to chutneys, a sauce containing fruits or vegetables that is eaten with other dishes. In Latin America, the leaves are often
50		Purslane	<i>Portulaca oleracea</i>	Spiller	Full	Minimal	Well-Drained Soils, Poor Infertile Soils, Fertile Loamy Soils, Shallow Media (8-10cm)	Food (Fruit & Vegetable: Leaves and young shoots are consumed as a vegetable. The leaves are rich in omega-3 fatty acids. Flower buds are added to salads.) Medicinal (It is used in many countries (particularly China) as traditional medicine to treat a wide variety of ailments, such as colds, wounds, and diarrhea.)

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51		Curry leaf	<i>Murraya koenigii</i>	Thriller	Full	Moderate	Well-Drained Soils	Edible Plant Parts (Edible Leaves) Food (Herb & Spice: The leaves are used to flavor Indian curries.) Medicinal (The essential oil found in the leaves and seeds have antibacterial and anti-fungal activity.)
52		Sweet Potato Leaf	<i>Ipomoea batatas</i>	Spiller	Full Sun	Full	Sun-loving, although tolerant of semi-shade conditions, and water-loving, with growth impaired by low water supply. However, <i>I. batatas</i> is also	Edible Plant Parts (Edible Storage Organs; Edible Leaves) Food (Fruit & Vegetable: In Singapore, as well as other parts of Southeast Asia, tender leaves are stir-fried with sambal belacan (spicy shrimp paste). The tubers are also boiled to make a sweet soup, fried to make French fries and stewed to make porridge.)
53		Serai	<i>Cymbopogon citratus</i>	Thriller	Full Sun	Moderate	Well-Drained Soils, Shallow Media (8 -10cm), Easy to Grow	[Others]: Culinary: Fragrant pseudostems commonly sold in supermarkets and grocery stores for use in curries, seafood and poultry dishes, as well as in ethnic favourites like Tom Yam Soup. Fresh or dried leaves tough and indigestible, but can be used to scent tea, soups and stews. Medicinal: Leaves can be boiled to make a refreshing tea to relieve stomach cramps, flatulence, colic and other digestive
54		Kuching Galak	<i>Acalypha indica</i>	Filler/Thriller	Half sun/Full shade	Full/Moderate	Moist Soils, Fertile Loamy Soils	Edible Plant Parts (Edible Leaves; Edible Roots) Food (Fruit & Vegetable: In India, the plant is cultivated for its edible shoots, which are eaten as a cooked vegetable.) Medicinal (The roots and leaves have laxative properties. Juice of the leaves is taken as emetic. A product of fresh leaves is useful on ulcers. In East Africa the leaf sap is
55		Okinawan Spinach	<i>Gynura bicolor</i>	Filler/Thriller	Half sun	Moderate	Well-Drained Soils, Fertile Loamy Soils	Edible Plant Parts (Edible Leaves) Food (Fruit & Vegetable) Edible Plant Parts (Edible Leaves)
56		Chocolate Mint	<i>Mentha x piperita f. citrata 'Chocolate'</i>	Filler	Full Sun	Full/Moderate	Moist Soils, Well-Drained Soils, Fertile Loamy Soils	Edible Plant Parts (Edible Leaves) Food (Herb & Spice: The leaves have a light chocolate taste and aroma. It is often used in desserts or as a garnish. To store the leaves for later use, you can freeze or air-dry them. To air-dry, hang a bundle of stems upside down or spread them on a tray until dry, and then store them in an airtight container.)

## MEDICINE BED

57		Misai Kuching	<i>Orthosiphon aristatus</i>	Thriller	Full	Moderate	Moist Soils, Well-Drained Soils	Food (Herb & Spice) Medicinal ( It is mainly taken to stimulate urination. According to Indonesian and Malaysian folk medicine, bladder or kidney pain, gout, rheumatism and arteriosclerosis can be treated by drinking a decoction of leaves boiled in water. In Vietnamese folk medicine, a plant infusion is used to treat influenza, hepatitis, )
58		Keci Beling	<i>Strobilanthes crispia</i>	Thriller	Full	Moderate	Easy to Grow	Edible Plant Parts (Edible Leaves) Edible Plant Parts (Edible Leaves), Medicinal (In folk medicine, the leaves are used to treat cancer, diabetes, jaundice, haemorrhoids and ulcers.)
59		Magenta plant	<i>Peristrophe roxburghiana</i>	Thriller	Full/Half Sun	Moderate	It is best grown under partial sun, in moist and well-drained soil.	Medicinal (A poultice made from pounded leaves is said to relieve skin complaints in traditional medicine. ), Timber & Products (A red dye can be extracted from the leaves and is used in Indonesia to colour cotton and mats. )
60		Indian Snakeweed	<i>Stachytarpheta indica</i>	Filler	Full/Half Sun	Moderate	Plant in well-drained, fertile soil enriched with compost. To prevent excessive establishment of new seedlings, remove spent	Food (Herb & Spice) Medicinal [Others]: In Nigeria, Snakeweed is traditionally used to treat diabetes and fever. In West Africa, the juice from the plant is used to treat cataract and sores on children's ears. In Brazil, fresh leaf is crushed and applied on ulcers. Leaf extracts were shown to

## Green Roof @ University Malaya, List of plant species by IEN Consultants

No.	Image	General Name	Scientific Name	Type	Sun	Watering	Soil Condition	Functionality
61		Hsian-tsao (cincao)	Platostoma palustre	Filler	Full/Half Sun	Moderate	Cincau requires moist, but well-drained soil, and it is sensitive to drought.	Food (Herb & Spice: Hsian-tsao leaves has been used to make jelly desserts and beverages by the Chinese for centuries. In Singapore, the dried leaves and shoots are sold in Chinese medical halls. Grass Jelly, a popular local dessert, is prepared by boiling the dried shoots in water with sugar and agar and allowing the strained liquid to set. Grass Jelly or Cincau Tea is thought to have a cooling effect on the body. )
62		Wandering Jew	Tradescantia zebrina	Spiller	Half Sun	Moderate	Prefers bright shade and moist, fertile organic soils. Ideal as creeping groundcover or bedding plants. Can also be grown in hanging baskets.	Edible Plant Parts (Edible Leaves), Medicinal (Leaves made into tea for kidney ailments.)
63		Red Sessile Joyweed	Alternanthera sessilis 'Red'	Spiller	Full/Half Sun	Moderate	Well-Drained Soils, Fertile Loamy Soils	Food (Herb & Spice: Herbal tea is prepared by boiling the leaves in water.) Medicinal (A study by Tan and Kim (2013) showed that leaf extracts may have antidiabetic compounds. Diabetic rats fed with leaf extracts had lower blood sugar and higher insulin levels compared to untreated rats.)
64		Shiny bush	Peperomia pellucida	Filler	Half sun/Full shade	Moderate	Occurs in forests and cliffs on wet soils.	Food (Fruit & Vegetable) Medicinal (In Indonesian folk medicine, bruised leaves are applied to the head to relieve headache during fever. The juice obtained from the leaves is taken for abdominal pain and colic. In the Philippines, the plant is applied as a poultice for abscesses and boils. In India, a whole plant decoction (crushed plant material boiled
65		Sabah Snake Grass	Clinacanthus nutans	Filler	Full/Half Sun	Moderate	Moist Soils, Well-Drained Soils, Fertile Loamy Soils	Edible Plant Parts (Edible Leaves) Food (Herb & Spice) Medicinal
66		Hempedu Bumi	Andrographis paniculata	Filler/Thriller	Full Sun	Moderate	Well-Drained Soils, Saline Soils / Salt Spray, Poor Infertile Soils, Fertile Loamy Soils, Easy to Grow	Edible Plant Parts (Edible Leaves) Edible Plant Parts (Edible Leaves), Medicinal (Traditionally used in Asia to treat colds, sinusitis and other upper-respiratory ailments, thus also known as 'Indian Echinacea'. Regarded as 'cooling' herb in Traditional Chinese Medicine, used as fever remedy and to eliminate heat and toxins from body. Also used as stomachache
67		Rerama	Christia vespertilionis	Filler/Spiller	Half Sun	Moderate		Medicinal (In folk medicine, the whole plant is used to treat tuberculosis and snake bites. The leaves are also applied directly onto the body for healing bone fractures. )
68		Jiaogulan	Gynostemma pentaphyllum	Filler/Spiller	Half Sun	Moderate	Well-Drained Soils	Edible Plant Parts (Edible Leaves) Medicinal (Leaves and young stems reportedly can be cooked to make tea. Medical benefits include strengthening immune systems, reducing blood glucose and cholesterol levels. )
69		Daun Rusa	Justicia gendarussa	Thriller	Full/Half Sun	Moderate	It prefers light, sandy soil in sun or partial shade. Likes constant moisture and well draining soil. Fast-growing, tolerable to many soil types and growth	Food (Herb & Spice) Medicinal [Others]: Medicinal: Plant is traditionally used to treat chronic rheumatism, headache, earache, fever, cough, bronchitis, inflammation, bruises, paralysis of one side of the body and facial paralysis. The entire plant is emetic (an agent that induces
70		Indian Borage	Plectranthus amboinicus	Filler	Half Sun	Moderate	Well-Drained Soils, [Remarks] (Sandy soil is ideal.)	Ethnobotanical Uses : Food (Herb & Spice) Medicinal [Others]: Food: The leaves are used to add flavor to meat and bean dishes, especially in Caribbean cuisine. The flavor is described as being a combination of thyme and